

RECEIVED

APR 30 2001

1644

TECH CENTER 1600/2900

A. Deloitte
RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/147,443DDATE: 04/17/2001
TIME: 13:37:07Input Set : A:\09147443.app
Output Set: N:\CRF3\04172001\I147443D.raw

ENTERED

3 <110> APPLICANT: Morell, Andreas
4 Imboden, Martin
5 Stadler, Beda
6 Miescher, Sylvia
7 Vogel, Monique
8 Amstutz, Hanspeter
10 <120> TITLE OF INVENTION: POLYPEPTIDES CAPABLE OF FORMING ANTIGEN BINDING
STRUCTURES WITH SPECIFICITY FOR THE RHESUS D ANTIGENS,
THE DNA ENCODING THEM AND THE PROCESS FOR THEIR
PREPARATION AND USE
15 <130> FILE REFERENCE: 6816/P63221US0
17 <140> CURRENT APPLICATION NUMBER: 09/147,443D
18 <141> CURRENT FILING DATE: 1999-01-21
20 <150> PRIOR APPLICATION NUMBER: PCT/EP97/03253
21 <151> PRIOR FILING DATE: 1997-06-20
23 <150> PRIOR APPLICATION NUMBER: EP 96810421.6
24 <151> PRIOR FILING DATE: 1996-06-24
26 <160> NUMBER OF SEQ ID NOS: 79
28 <170> SOFTWARE: PatentIn Ver. 2.1
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 375
32 <212> TYPE: DNA
33 <213> ORGANISM: Homo sapiens
35 <220> FEATURE:
36 <221> NAME/KEY: CDS
37 <222> LOCATION: (1)...(375)
39 <400> SEQUENCE: 1 48
40 cag gtg aaa ctg ctc gag tct ggg gga ggc gtg gtc cag cct ggg agg 48
41 Gln Val Lys Leu Leu Glu Ser Gly Gly Val Val Gln Pro Gly Arg 15
42 1 5 10 15 96
44 tcc ctg aga ctc tcc tgt ata gcg tct gga ttc acc ctc agg aat tat 96
45 Ser Leu Arg Leu Ser Cys Ile Ala Ser Gly Phe Thr Leu Arg Asn Tyr 30
46 20 25 30 144
48 gcc atg cac tgg gtc cgc cag gct cca ggc aag ggg ctg gag tgg gtg 144
49 Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Leu Glu Trp Val 45
50 35 40 45 192
52 gca ggt ata tgg ttt gat gga agt aac aaa aac tat gca gac tcc gtg 192
53 Ala Gly Ile Trp Phe Asp Gly Ser Asn Lys Asn Tyr Ala Asp Ser Val 60
54 50 55 60 240
56 aag ggc cga ttc acc atc tcc aga gac aat tcc aag aac acg ctg tat 240
57 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 80
58 65 70 75 80 288
60 ctg caa ctg aac agc ctg aga gac gag gac acg gct gtg tat tat tgt 288
61 Leu Gln Leu Asn Ser Leu Arg Asp Glu Asp Thr Ala Val Tyr Tyr Cys 95
62 85 90 95 336
64 gcg aga gag cga gca gca cgt ggt att tct agg ttc tat tac tac atg 336
65 Ala Arg Glu Arg Ala Ala Arg Gly Ile Ser Arg Phe Tyr Tyr Tyr Met

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/147,443D

DATE: 04/17/2001
TIME: 13:37:07

Input Set : A:\09147443.app
Output Set: N:\CRF3\04172001\I147443D.raw

66	100	105	110	375
68	gac gtc tgg ggc aaa ggg acc acg gtc acc gtc tcc cca			
69	Asp Val Trp Gly Lys Gly Thr Thr Val Thr Val Ser Pro			
70	115	120	125	
73	<210> SEQ ID NO: 2			
74	<211> LENGTH: 125			
75	<212> TYPE: PRT			
76	<213> ORGANISM: Homo sapiens			
78	<400> SEQUENCE: 2			
79	Gln Val Lys Leu Leu Glu Ser Gly Gly Val Val Gln Pro Gly Arg			
80	1 5 10 15			
82	Ser Leu Arg Leu Ser Cys Ile Ala Ser Gly Phe Thr Leu Arg Asn Tyr			
83	20 25 30			
85	Ala Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val			
86	35 40 45			
88	Ala Gly Ile Trp Phe Asp Gly Ser Asn Lys Asn Tyr Ala Asp Ser Val			
89	50 55 60			
91	Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr			80
92	65 70 75			
94	Leu Gln Leu Asn Ser Leu Arg Asp Glu Asp Thr Ala Val Tyr Tyr Cys			
95	85 90 95			
97	Ala Arg Glu Arg Ala Ala Arg Gly Ile Ser Arg Phe Tyr Tyr Met			
98	100 105 110			
100	Asp Val Trp Gly Lys Gly Thr Thr Val Thr Val Ser Pro			
101	115 120 125			
105	<210> SEQ ID NO: 3			
106	<211> LENGTH: 318			
107	<212> TYPE: DNA			
108	<213> ORGANISM: Homo sapiens			
110	<220> FEATURE:			
111	<221> NAME/KEY: CDS			
112	<222> LOCATION: (1)..(318)			
114	<400> SEQUENCE: 3			48
115	'gtg atg acc cag tct cca tcc tcc ctg tct gca tct gta ggc gac aga			
116	Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg			
117	1 5 10 15			
119	gtc acc atc act tgc cgg gca agt cag agc att agg agc cat ttg aat			
120	Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Arg Ser His Leu Asn			
121	20 25 30			
123	tgg tat cag cag aaa cca ggg aaa gcc cct aag ttg ctg atc tat ggt			144
124	Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Gly			
125	35 40 45			
127	gct tcc act ttg caa agt ggc gtc cca tca agg ttc agt ggc agt ggc			192
128	Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly			
129	50 55 60			
131	tct ggg gca gtt ttc act ctc acc atc gcc agt cta caa cct gaa gat			240
132	Ser Gly Ala Val Phe Thr Leu Thr Ile Ala Ser Leu Gln Pro Glu Asp			
133	65 70 75 80			
135	ttt gca act tac tac tgt caa gag agt tac agt aat cct cta atc acc			288

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/147,443D

DATE: 04/17/2001
TIME: 13:37:07

Input Set : A:\09147443.app
Output Set: N:\CRF3\04172001\I147443D.raw

136 Phe Ala Thr Tyr Tyr Cys Gln Glu Ser Tyr Ser Asn Pro Leu Ile Thr
137 85 90 95 318
139 ttc ggc caa ggg aca cga ctg gag act aaa
140 Phe Gly Gln Gly Thr Arg Leu Glu Thr Lys
141 100 105
144 <210> SEQ ID NO: 4
145 <211> LENGTH: 106
146 <212> TYPE: PRT
147 <213> ORGANISM: Homo sapiens
149 <400> SEQUENCE: 4
150 Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg
151 1 5 10 15
153 Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Arg Ser His Leu Asn
154 20 25 30
156 Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr Gly
157 35 40 45
159 Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
160 50 55 60
162 Ser Gly Ala Val Phe Thr Leu Thr Ile Ala Ser Leu Gln Pro Glu Asp
163 65 70 75 80
165 Phe Ala Thr Tyr Tyr Cys Gln Glu Ser Tyr Ser Asn Pro Leu Ile Thr
166 85 90 95
168 Phe Gly Gln Gly Thr Arg Leu Glu Thr Lys
169 100 105
173 <210> SEQ ID NO: 5
174 <211> LENGTH: 375
175 <212> TYPE: DNA
176 <213> ORGANISM: Homo sapiens
178 <220> FEATURE:
179 <221> NAME/KEY: CDS
180 <222> LOCATION: (1)..(375)
182 <400> SEQUENCE: 5 48
183 cag gtg aaa ctg ctc gag tct ggg gga ggc gtg gtc cag ccg ggg ggg
184 Gln Val Lys Leu Leu Glu Ser Gly Gly Val Val Gln Pro Gly Gly
185 1 5 10 15 96
187 tcc ctg aga ctc tcc tgt gaa gcg tct gga ttc gcc ctc aga agt tct
188 Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Phe Ala Leu Arg Ser Ser
189 20 25 30 144
191 ggc atg cac tgg gtc cgc cag gct cct ggc aag ggg ctg gag tgg gtg
192 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
193 35 40 45 192
195 gca ctt ata tgg ttt gat gga agt atc aga tcg tat gca gaa tcc gtg
196 Ala Leu Ile Trp Phe Asp Gly Ser Ile Arg Ser Tyr Ala Glu Ser Val
197 50 55 60 240
199 aag ggc cga ttc acc atc tcc aga gac act tcc aag aac acc cta tat
200 Lys Gly Arg Phe Thr Ile Ser Arg Asp Thr Ser Lys Asn Thr Leu Tyr
201 65 70 75 80 288
203 ctc caa atg cgc agt ctg agt gcc gac gac acg gct gtg tat tac tgt
204 Leu Gln Met Arg Ser Leu Ser Ala Asp Asp Thr Ala Val Tyr Tyr Cys

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/147,443D

DATE: 04/17/2001
TIME: 13:37:07

Input Set : A:\09147443.app
Output Set: N:\CRF3\04172001\I147443D.raw

85 90 95 336
205 ggc gac aac aag gcg gtt cgg gga att agc agg tac aac tat tac atg
207 Ala Arg Asp Lys Ala Val Arg Gly Ile Ser Arg Tyr Asn Tyr Tyr Met
208 100 105 110 375
209 211 gac gtc tgg ggc aaa ggg acc acg gtc acc gtc tcc tca
212 Asp Val Trp Gly Lys Gly Thr Thr Val Thr Val Ser Ser
213 115 120 125
214 216 <210> SEQ ID NO: 6
217 <211> LENGTH: 125
218 <212> TYPE: PRT
219 <213> ORGANISM: Homo sapiens
220 <400> SEQUENCE: 6
221 Gln Val Lys Leu Leu Glu Ser Gly Gly Val Val Gln Pro Gly Gly
222 1 5 10 15
223 Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Phe Ala Leu Arg Ser Ser
224 20 25 30
225 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
226 35 40 45
227 Ala Leu Ile Trp Phe Asp Gly Ser Ile Arg Ser Tyr Ala Glu Ser Val
228 50 55 60 80
229 Lys Gly Arg Phe Thr Ile Ser Arg Asp Thr Ser Lys Asn Thr Leu Tyr
230 65 70 75 95
231 Leu Gln Met Arg Ser Leu Ser Ala Asp Asp Thr Ala Val Tyr Tyr Cys
232 85 90 105 110
233 Ala Arg Asp Lys Ala Val Arg Gly Ile Ser Arg Tyr Asn Tyr Tyr Met
234 100 105 120 125
235 115
236 240 <210> SEQ ID NO: 7
237 <211> LENGTH: 318
238 <212> TYPE: DNA
239 <213> ORGANISM: Homo sapiens
240 <220> FEATURE:
241 <221> NAME/KEY: CDS
242 <222> LOCATION: (1)..(318)
243 <400> SEQUENCE: 7 48
244 gtc atg acc cag tct cca tcc tcc ctg tct gca tct gta gga gac aga
245 gtg atg acc cag tct cca tcc tcc ctg tct gca tct gta gga gac aga 48
246 Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg
247 1 5 10 15 96
248 gtc acc atc act tgc cgg gca agt cag aac att atc cgc tat tta aat
249 Val Thr Ile Thr Cys Arg Ala Ser Gln Asn Ile Ile Arg Tyr Leu Asn
250 20 25 30
251 tgg tat cag cag aag cca ggg aaa gcc cct agg ctc ctg atc tat ggt 144
252 Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Arg Leu Leu Ile Tyr Gly
253 35 40 45
254 gcg tcc act ttg caa agt ggg gtc cca tca agg ttc agt ggc agt gga 192
255 Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
256 50 55 60
257 tct ggg aca gat ttc act ctc acc atc agt agt ctg caa cct gaa gat 240
258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/147,443D

DATE: 04/17/2001
TIME: 13:37:07

Input Set : A:\09147443.app
Output Set: N:\CRF3\04172001\I147443D.raw

275 Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
276 65 70 75 80 288
278 ttt gca act tac tac tgt caa cag agt tac cgt acc cct cca ttc act
279 Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Arg Thr Pro Pro Phe Thr
280 85 90 95 318
282 ttc ggc cct ggg acc aaa gtg gag atc aaa
283 Phe Gly Pro Gly Thr Lys Val Glu Ile Lys
284 100 105
287 <210> SEQ ID NO: 8
288 <211> LENGTH: 106
289 <212> TYPE: PRT
290 <213> ORGANISM: Homo sapiens
292 <400> SEQUENCE: 8
293 Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg
294 1 5 10 15
296 Val Thr Ile Thr Cys Arg Ala Ser Gln Asn Ile Ile Arg Tyr Leu Asn
297 20 25 30
299 Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Arg Leu Leu Ile Tyr Gly
300 35 40 45
302 Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly Ser Gly
303 50 55 60
305 Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp
306 65 70 75 80
308 Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Arg Thr Pro Pro Phe Thr
309 85 90 95
311 Phe Gly Pro Gly Thr Lys Val Glu Ile Lys
312 100 105
316 <210> SEQ ID NO: 9
317 <211> LENGTH: 375
318 <212> TYPE: DNA
319 <213> ORGANISM: Homo sapiens
321 <220> FEATURE:
322 <221> NAME/KEY: CDS
323 <222> LOCATION: (1)..(375)
325 <400> SEQUENCE: 9 48
326 cag gtg aaa ctg ctc gag tct ggg gga ggc gtg gtc cag ccg ggg ggg 48
327 Gln Val Lys Leu Leu Glu Ser Gly Gly Val Val Gln Pro Gly Gly
328 1 5 10 15 96
330 tcc ctg aga ctc tcc tgt gaa gca tct gga ttc acc ctc aga agt tct
331 Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Phe Thr Leu Arg Ser Ser
332 20 25 30 144
334 ggc atg cac tgg gtc cgc cag gct cct ggc aag ggg ctg gag tgg gtg
335 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
336 35 40 45 192
338 gca ctt ata tgg ttt gat gga agt atc aga tcg tat gca gaa tcc gtg
339 Ala Leu Ile Trp Phe Asp Gly Ser Ile Arg Ser Tyr Ala Glu Ser Val
340 50 55 60 240
342 aag ggc cga ttc acc atc tcc aga gac act tcc aag aac acc cta tat
343 Lys Gly Arg Phe Thr Ile Ser Arg Asp Thr Ser Lys Asn Thr Leu Tyr

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/147,443D

DATE: 04/17/2001
TIME: 13:37:08

Input Set : A:\09147443.app
Output Set: N:\CRF3\04172001\I147443D.raw